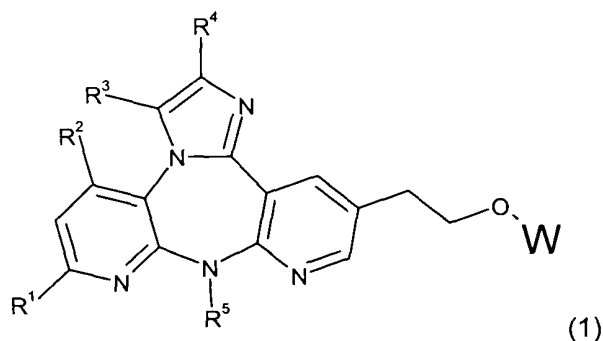


# CLAIMS

1. A compound represented by formula 1:



wherein

**R<sup>1</sup>** is selected from the group consisting of H, halogen, (C<sub>1-4</sub>)alkyl, O(C<sub>1-4</sub>)alkyl, and haloalkyl;

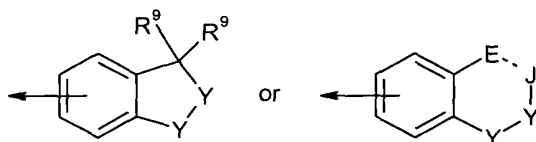
**R<sup>2</sup>** is H or Me;

**R<sup>3</sup>** is H or (C<sub>1-4</sub>)alkyl;

**R<sup>4</sup>** is H or (C<sub>1-4</sub>)alkyl;

**R<sup>5</sup>** is (C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>)alkyl(C<sub>3-7</sub>)cycloalkyl, or (C<sub>3-7</sub>)cycloalkyl; and

**W** is selected from:



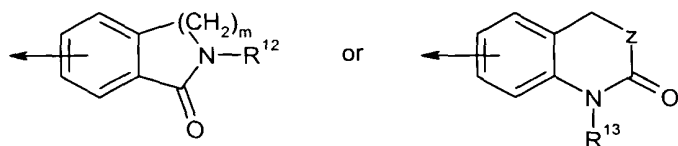
wherein,

a) one of **Y** is SO<sub>2</sub> and the other **Y** is NR<sup>6</sup>, provided that both are not the same, wherein **R<sup>6</sup>** is selected from the group consisting of: H, C(O)O(C<sub>1-4</sub>)alkyl, (C<sub>1-4</sub>) alkyl or (C<sub>1-4</sub>) alkyl substituted with either a pyridinyl-N-oxide or C(O)OR<sup>8</sup> wherein **R<sup>8</sup>** is H or (C<sub>1-4</sub>) alkyl; and each **R<sup>9</sup>** is independently H or (C<sub>1-4</sub>) alkyl; and

b) **E** is CR<sup>10</sup>R<sup>10</sup> wherein each **R<sup>10</sup>** is independently H or (C<sub>1-4</sub>) alkyl, **J** is CH<sub>2</sub> and the dotted line represents a single bond; or

c) **E** and **J** are both CR<sup>11</sup> wherein **R<sup>11</sup>** is H or (C<sub>1-4</sub>) alkyl and the dotted line represents a double bond; or

**W** is selected from:



wherein,

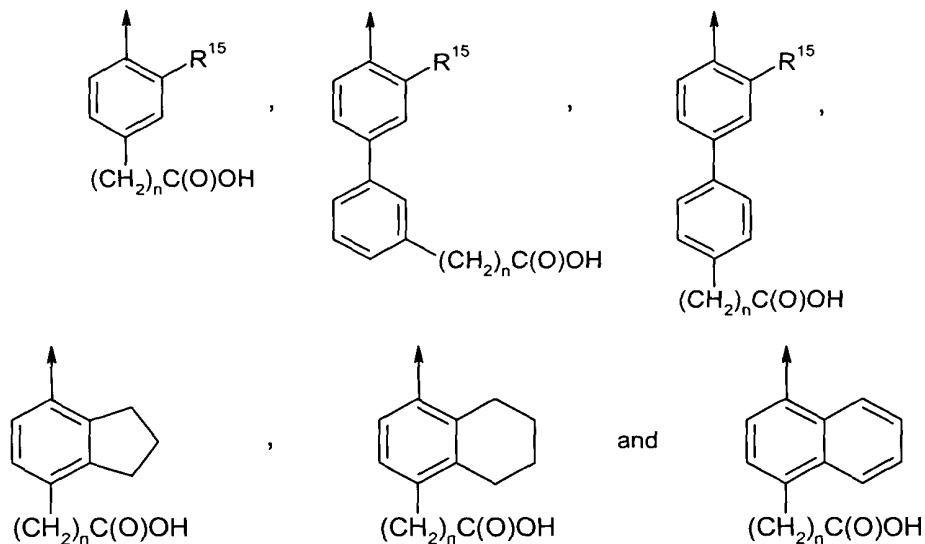
m is 1 or 2,

$R^{12}$  is H or  $C_{(1-4)}$  alkyl,

$R^{13}$  is H or  $(C_{1-4})$  alkyl, and

Z is O or Z is  $NR^{14}$  wherein  $R^{14}$  is H or  $(C_{1-4})$  alkyl; or

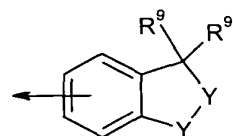
W is selected from a group of aromatic radicals consisting of:



wherein  $R^{15}$  is  $(C_{1-4})$  alkyl or  $CF_3$ , and n is the integer 0, 1 or 2, or  
a pharmaceutically acceptable salt, ester or a prodrug thereof.

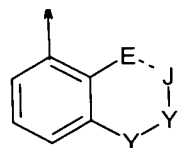
2. The compound according to claim 1, wherein  $R^1$  is selected from the group consisting of: H, Cl, F,  $(C_{1-4})$  alkyl and  $CF_3$ ;  $R^2$ ,  $R^3$  and  $R^4$  is each independently H or Me;  $R^5$  is ethyl or cyclopropyl;

W is:

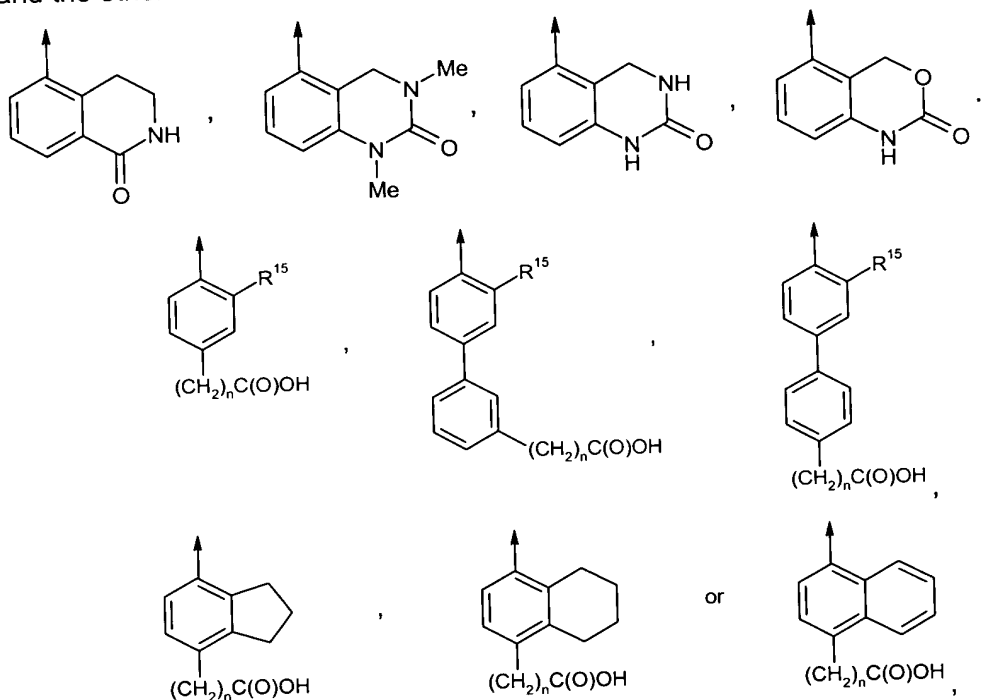


wherein Y is  $SO_2$  and the other Y is  $NR^6$ , provided that both are not the same,  $R^6$  is H,  $C(O)OMe$ ,  $C(O)OEt$ , (4-pyridinyl-N-oxide)methyl,  $CH_2C(O)OH$ ,

$\text{CH}_2\text{C}(\text{O})\text{OMe}$ ,  $\text{CH}_2\text{C}(\text{O})\text{OEt}$  or  $\text{CH}_2\text{C}(\text{O})\text{OCMe}_3$ , and each  $\text{R}^9$  is independently H or Me; or

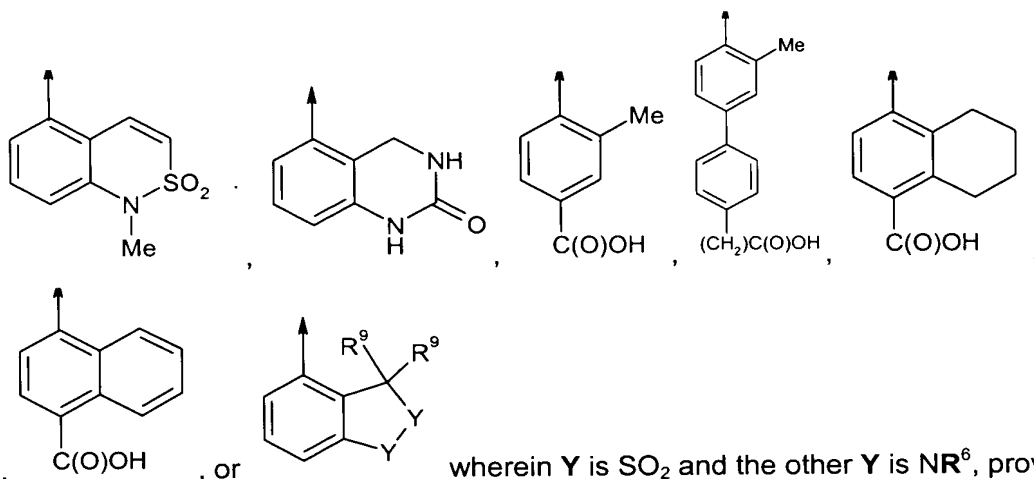


wherein  $\text{E}$  is  $\text{CR}^{10}\text{R}^{10}$  wherein each of  $\text{R}^{10}$  is independently H or Me,  $\text{J}$  is  $\text{CH}_2$  and the dotted line represents a single bond; or both  $\text{E}$  and  $\text{J}$  are  $\text{CR}^{11}$  wherein  $\text{R}^{11}$  is H or Me and the dotted line represents a double bond; one of  $\text{Y}$  is  $\text{SO}_2$  and the other  $\text{Y}$  is  $\text{NR}^6$  wherein  $\text{R}^6$  is hydrogen or methyl; or



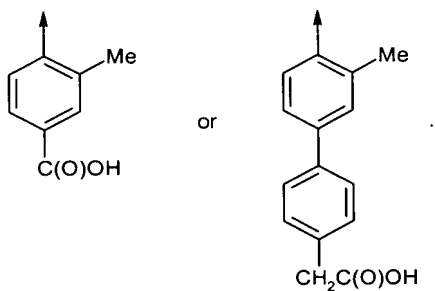
wherein  $\text{R}^{15}$  is Me or Et, and  $n$  is 0 or 1.

3. The compound according to claim 2, wherein  $\text{R}^{15}$  is Me.
  4. The compound according to claim 3, wherein  $\text{R}^1$  is H, Cl, F and Me;  $\text{R}^2$  is H or Me;
- W** is:

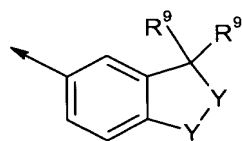


that both are not the same, R<sup>6</sup> is H, C(O)OEt, (4-pyridinyl-N-oxide)methyl, CH<sub>2</sub>C(O)OH, CH<sub>2</sub>C(O)OMe, CH<sub>2</sub>C(O)OEt or CH<sub>2</sub>C(O)OCMe<sub>3</sub>, and each R<sup>9</sup> is independently H or Me.

5. The compound according to claim 4, wherein R<sup>3</sup> is Me, R<sup>6</sup> is H, C(O)OEt or (4-pyridinyl-N-oxide)methyl, and W is:



6. The compound according to claim 4, wherein W is:



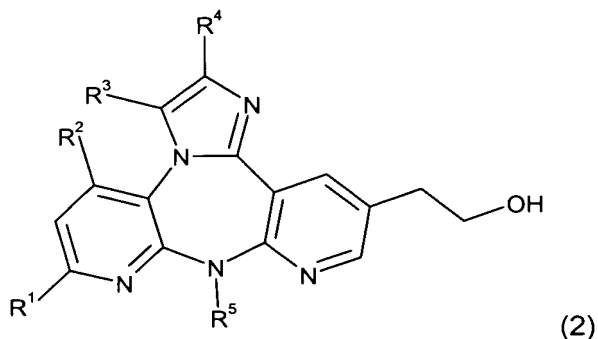
wherein one Y is SO<sub>2</sub> and the other Y is NR<sup>6</sup>, provided that both are not the same, R<sup>6</sup> is H, C(O)OEt, CH<sub>2</sub>C(O)OH, CH<sub>2</sub>C(O)OCMe<sub>3</sub>, (4-pyridinyl-N-oxide)methyl; and each R<sup>9</sup> is independently H or Me.

7. The compound according to claim 6, wherein R<sup>6</sup> is H and each R<sup>9</sup> is Me.
8. The use of a compound of formula 1 according to claim 1, for the

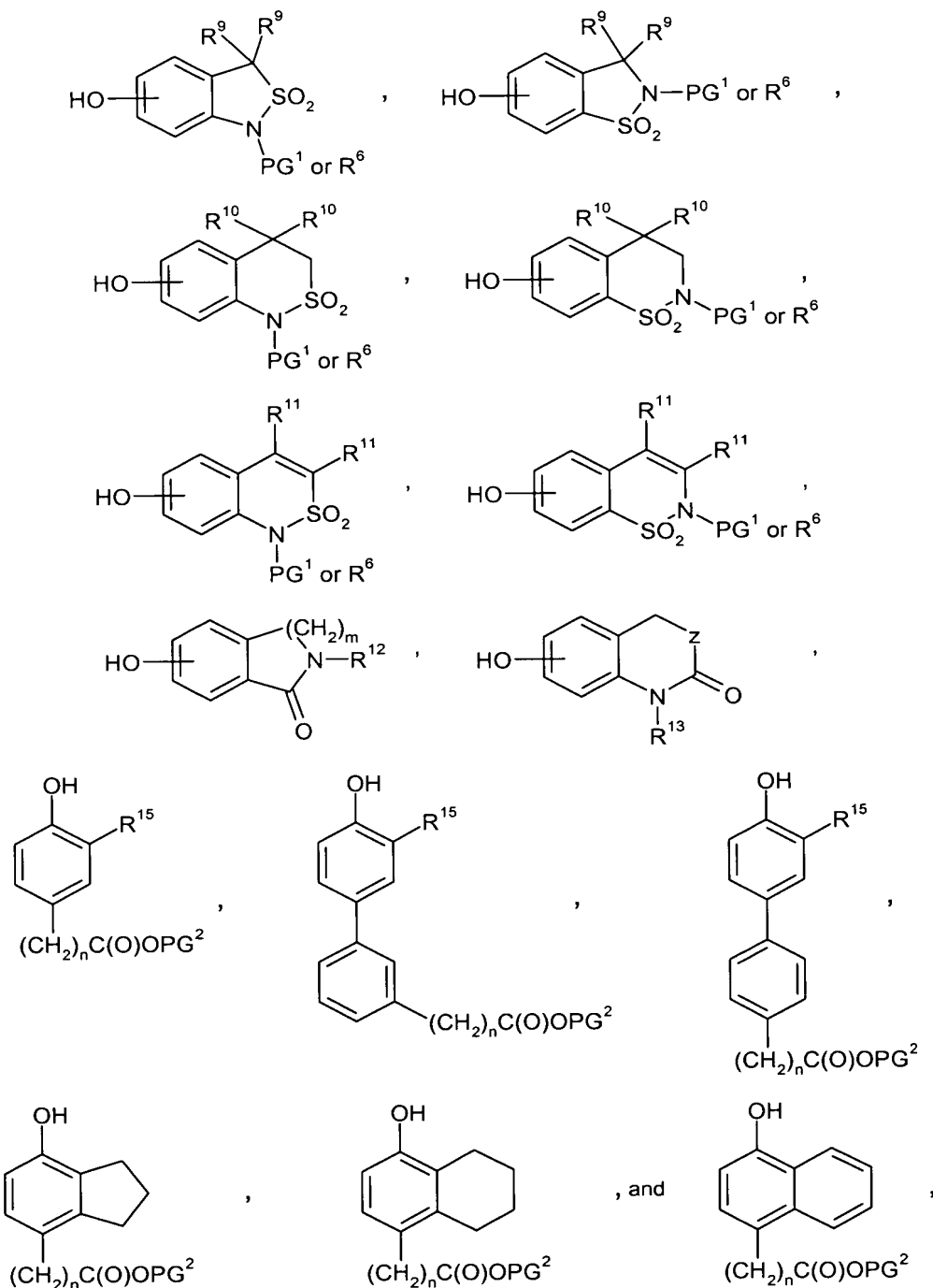
manufacture of a medicament for the treatment or prevention of HIV infection.

9. A pharmaceutical preparation for use in the treatment or prevention of HIV infection, wherein the active ingredient is a compound of formula 1 according to claim 1, or a pharmaceutically acceptable salt, ester or prodrug thereof.
10. The use of a compound of formula 1 according to claim 1, as an anti-HIV infective.
11. A pharmaceutical composition for the treatment or prevention of HIV infection, comprising a compound of formula 1 according to claim 1, or a pharmaceutically acceptable salt, ester or prodrug thereof, in combination with a pharmaceutically acceptable carrier.
12. A method for the treatment or prevention of HIV infection, comprising administering to a patient an HIV inhibiting amount of a compound of formula 1 according to claim 1, or a pharmaceutically acceptable salt, ester or prodrug thereof.
13. A method for the treatment or prevention of HIV infection, comprising administering to a patient an HIV inhibiting amount of a pharmaceutical composition according to claim 11.
14. A process for producing a compound of formula 1 according to claim 1, comprising the step:

- coupling a compound of formula 2:



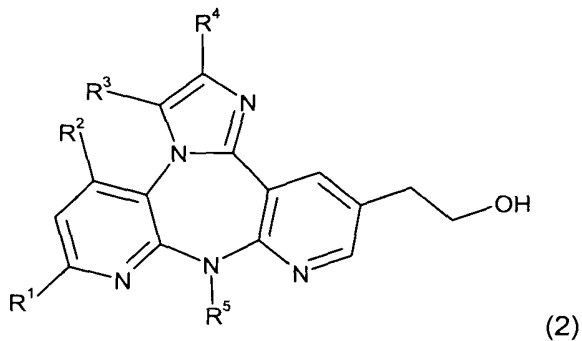
wherein **R**<sup>1</sup>, **R**<sup>2</sup>, **R**<sup>3</sup>, **R**<sup>4</sup>, and **R**<sup>5</sup> are as defined in claim 1, with a phenolic derivative selected from:



wherein PG<sup>1</sup> is a nitrogen protecting group and PG<sup>2</sup> is a carboxy protecting group, said protecting groups being removable under mildly acidic, mildly alkaline or reductive conditions, and R<sup>6</sup>, R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup>, R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup>, m, n, and Z are as

defined in claim 1.

15. The process according to claim 14, wherein said nitrogen protecting group is selected from: alkyl esters; aralkyl esters; and esters that can be cleaved by mild base treatment or mild reductive means.
16. The process according to claim 14, wherein said carboxy protecting group is selected from: Boc (*tert*-butoxycarbonyl) and alkyl carbamates.
17. An intermediate compound of formula 2:



wherein **R<sup>1</sup>**, **R<sup>2</sup>**, **R<sup>3</sup>**, **R<sup>4</sup>**, and **R<sup>5</sup>** are as defined in claim 1.